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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,297	11/02/2001	Roland Boss	10011080-1	2488

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/001,297

Applicant(s)

BOSS, ROLAND

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2003.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7-10,12-16 and 27 is/are pending in the application.  
4a) Of the above claim(s) 5 and 14 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,4,7-10,12,13,15,16 and 27 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/11/05 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claim Rejections - 35 USC § 102*

3. Claims 1, 4, 7, 9, 10, 12, 13, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (U.S. Patent 5,350,268).

Muller discloses a method of binding a plurality of sheets into a bound sheet stack to form a book, catalog, booklet/pamphlet, etc. Muller teaches (sequentially) providing a plurality of sheets (e.g. including three or more), printing an image on each sheet, applying a binding/protective polymer coating to each sheet, overlaying the plurality of sheets to form a stack, and applying ultrasonic energy to the stack in a binding region (e.g. along a folded portion of the sheets extending from the edge) such that the binding/protective polymer coating of each sheet fuses to adjacent sheets in the stack to form a bound sheet stack (Figure 9 and Column 5, lines 45-48 and Column 6, lines 1-14). Muller teaches ultrasonic binding by fusing the

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binding/protective polymer coating produces a bond that requires less labor and cost than can be achieved by binding through stapling, sewing, adhesive binding, etc. (Column 2, lines 14-25).

Muller does not specifically recite the binding/protective polymer coating is transparent.

However, as Muller teaches the binding/protective polymer coating is applied after printing

(Column 5, lines 45-48 and Column 6, lines 1-14) it is inherent to Muller that the

binding/protective polymeric coating is transparent.

#### ***Claim Rejections - 35 USC § 103***

4. Claims 1, 4, 7, 9, 10, 12, 13, 15, 16, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller optionally in view of the admitted prior art (Specification pages 1-3).

Muller is described in full detail above. As noted above, Muller does not specifically recite the binding/protective polymer coating is transparent. However, as Muller teaches the binding/protective polymer coating is applied after printing (Column 5, lines 45-48 and Column 6, lines 1-14) it appears intrinsic to Muller that the binding/protective polymeric coating is transparent. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the binding/protective polymer coating taught by Muller one that is transparent such that the printed images on the sheet are visible as would have been well known in the art as shown for example optionally by the admitted prior art.

Regarding claim 27, Muller while teaching printing an image on each does not specifically teach printing includes thermally fusing an imaging media to the sheet. However, Muller is not limited to any particular printing method, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the printing taught by

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Muller using a well know process such as thermal image fusing, it being noted the admitted prior art is optionally cited as an example in the art of this well know printing technique.

The admitted prior art discloses conventional methods to bind sheets of media together. The admitted prior art teaches (sequentially) providing multiple sheets, applying (e.g. by “thermally” fusing) an imaging media to the sheets from an imaging device, coating each sheet with a protective polymer coating (the coating may be transparent), overlaying the sheets to form a sheet stack, and binding the sheets together in a binding region by for example stapling, stitching, gluing, etc. (Page 1, lines 9-15 and Page 2, lines 3-26 and Page 3, lines 1-3).

5. Claims 1, 4, 7, 10, 12, 13, 15, 16, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Specification pages 1-3) in view of Muller.

The admitted prior art is described above in full detail. The admitted prior art is silent as to binding the sheets together by fusing the sheets through the protective polymer coating in the binding regions. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to bind the multiple polymer coated sheets taught by the admitted prior art by ultrasonic fusing in the binding regions as it was a well known alternative in the art to form a bound paper stack as opposed to binding by stapling, stitching, gluing, etc. as shown for example by Muller for benefits such as easier to recycle, cheaper material and labor cost, etc. Muller is described above in full detail.

Regarding claims 13 and 15, the admitted prior art teaches binding multiple media sheets together. It would have been obvious to one of ordinary skill in the art at the time the invention was made that “multiple” media sheets would have encompassed binding three sheets.

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6. Claims 7-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller as applied to claims 1, 4, 7, 9, 10, 12, 13, 15, and 16 above, Muller and optionally the admitted prior art as applied to claims 1, 4, 7, 9, 10, 12, 13, 15, 16, and 27 above, or the admitted prior art and Muller as applied to claims 1, 4, 7, 10, 12, 13, 15, 16, and 27 above, and further optionally in view of Sendor et al. (GB 1289387).

Muller (or Muller as optionally modified by the admitted prior art or the admitted prior art as modified by Muller) does not specifically teach all the various binding regions claimed. However, it is noted Muller (or Muller as optionally modified by the admitted prior art or the admitted prior art as modified by Muller) teaches binding a plurality of sheets together to form a bound stack. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the method taught by Muller (or Muller as optionally modified by the admitted prior art or the admitted prior art as modified by Muller) used to form products such as books, catalogs, booklets/pamphlets, etc. would have included fusing in the different claimed binding regions depending upon the particular above product made, Sendor et al. optionally cited as evidence of it requiring nothing more than ordinary skill to determine these well known binding regions.

Sendor et al. disclose a method of binding a plurality (e.g. more than three) of sheets into a bound stack to form a book, magazine, pamphlet, letter, etc. Sendor et al. teach providing a plurality of paper sheets, applying a binding/protective polymer (e.g. polyethylene) coating to at least a portion of each sheet, overlaying the plurality of sheets to form a stack, and applying binding energy (e.g. heat and pressure) to the stack in a binding region such that the binding/protective polymer coating of each sheet fuses to adjacent sheets in the stack to form a

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multiple paper form such as a book, magazine, pamphlet, letter, etc. Sender et al. teach binding by fusing the binding/protective polymer coating produces a bond that requires less labor and cost than can be achieved by binding through stapling, sewing, adhesive binding, mechanical binding, etc. Sender et al. further teach that choosing the particular binding regions as a function of the product produced is a conventional technique in the art (Page 1, lines 13-34, 48-52, and 69-72 and Page 3, lines 2-29 and 54-66).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 4, 7-10, 12, 13, 15, 16, and 27 have been considered but are moot in view of the new ground(s) of rejection. In view of applicants amendment to specifically require ultrasonic binding energy the previous rejections are withdrawn.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L. Goff whose telephone number is (571) 272-1216. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



JEFF H. AFTERGUT  
PRIMARY EXAMINER  
GROUP 1300